UNITED
NATIONS

TD

United Nations
Conference
on Trade and
Development

Distr.
GENERAL

TD/B/41(2)/10
10 January 1995

Original: ENGLISH

TRADE AND DEVELOPMENT BOARD
Forty-first session
Second part
Geneva, 20 March 1995
Item 3 of the provisional agenda

SUSTAINABLE DEVELOPMENT:
POLICY REVIEW OF UNCTAD'S ACTIVITIES ON SUSTAINABLE DEVELOPMENT

Report by the UNCTAD secretariat

GE.95-50115

CONTENTS

		Paragraphs
I.	Introduction	1 - 5
II.	UNCTAD's activities on sustainable development	6 - 58
	A. Internalization	6 - 9
	B. Trade	10 - 23
	C. Commodities	24 - 36
	D. Technology	37 - 43
	E. Services	44 - 48
	F. Privatization	49 - 52
	G. Finance	53 - 58
	H. Accounting	59
III.	Conclusions	60 - 64

Endnotes

I. INTRODUCTION

1. At the first part of its forty-first session, the Trade and Development Board decided to inscribe an item entitled "Sustainable development: policy review of UNCTAD's activities on sustainable development" on the agenda of the session's second part. The present report has been prepared to assist the members of the Board to undertake the desired policy review.

2. It will be recalled that issues relating to sustainable development were inscribed on the work programmes of a number of the Standing Committees and Ad Hoc Working Groups established following the eighth session of the Conference. In particular,

(a) The Standing Committee on Commodities agreed on a work programme which singled out sustainable development as one of its four priority areas;

(b) The Standing Committee on Poverty Alleviation agreed on a work programme of six priority areas which contains the following elements relating to sustainable development:

(i) analysis of the linkages between poverty and sustainable development;
(ii) examination of the implications for the poor of national and international policies relating to environment (e.g. application of the polluter-pays principle; environmental standards that might adversely affect the poor);

(c) The Standing Committee on Developing Services Sectors and its two sub-committees on shipping and insurance adopted work programmes containing the following relevant elements:

(i) the role played by the services sectors in contributing to growth and sustainable development;
(ii) comparative analysis of the factors which can contribute to sustainable development of ports and related port services;
(iii) alternative mechanisms to meet the insurance and reinsurance needs in respect of environmental impairments;

(d) The Ad Hoc Working Group on Interrelationship between Investment and Technology Transfer agreed on a work programme composed of three priority areas, of which one was entitled "Transfer and development of environmentally sound technologies"; and

(e) The Ad Hoc Working Group on Comparative Experiences with Privatization adopted a work programme which included an element on environmental aspects of privatization.

In addition, by its decision 402 (XXXIX), the Board agreed to consider the theme of "trade and environment" at the first part of its annual sessions. Subsequently, in its decision 415 (XL), the Board established and adopted terms of reference for an Ad Hoc Working Group on Trade, Environment and Development. Finally, following the transfer to UNCTAD of the former United Nations Centre on Transnational Corporations, the work of the Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting (ISAR), which reports to the Commission on Transnational Corporations, is being integrated into UNCTAD's intergovernmental work programme.

3. The institutional machinery has thus been established to permit the Board to undertake analysis and policy discussion on sustainable development in the context of seven primary sectors: trade; commodities; technology; services; poverty; privatisation; and accounting. In addition, the Board noted, in its

report to the General Assembly in response to the Assembly's resolution 47/191, that the UNCTAD secretariat was pursuing studies, funded by extrabudgetary resources, on market-based instruments for financing environmental protection, this work being focused primarily on the costs and benefits of CO_2 abatement, including tradeable entitlements, joint implementation of commitments, and tax-based instruments. The present report therefore covers also an eighth sector, finance, although it is recognized that no specific institutional forum within UNCTAD has as yet considered work on sustainable development in this sector. It is also recalled that agenda item 5(a) of the current Board session is devoted to "Sustainable development, population, human resources and environment" in the context of UNCTAD's contribution to the implementation of the United Nations New Agenda for the Development of Africa in the 1990s.

4. Although the present review is devoted to the work of UNCTAD *qua* intergovernmental body, it must be recognised that the documentation for intergovernmental consideration of the subject is prepared by the secretariat. It is worth recalling in this regard that the secretariat has organized its work on sustainable development by integrating analysis and (to the extent feasible and as supplemented by extra-budgetary resources) technical assistance activities into the regular work programmes of the substantive Divisions of the institution. No overheads or central "core" staff are allocated to this work. Rather, the officer-in-charge of one of the substantive divisions serves also as a secretariat-wide coordinator of work on sustainable development within the substantive Divisions.

5. Section II of this report presents a summary of the main issues which have been covered in each of the sectors listed above, together with conclusions on a cross-cutting theme, internalization. An attempt has been made to identify those issues which seem to the secretariat to be especially important for future work by the Board and its subsidiary bodies in the field of sustainable development. Finally, section III contains conclusions and recommendations drawn from this review.

II. UNCTAD'S ACTIVITIES ON SUSTAINABLE DEVELOPMENT

A. Internalization

6. A cross-cutting theme, which underlies policy work on sustainable development in all sectors of the Board's activity, is that of the internalization of environmental costs (and benefits). This was the subject of the Board's discussion on sustainable development at the second part of its fortieth session. In its agreed conclusions 411(XL), the Board agreed that the internalization of external environmental costs was of general importance in the follow-up to UNCED, particularly in the light of the Rio Principles, especially Principle 16, and noted that it requires a careful balancing of equity and efficiency and, within the former, of intra- and inter-generational considerations of a domestic and international nature. Indeed, internalization was agreed to be a means towards the ultimate goal of the efficient avoidance of environmental costs, not a goal in itself. In this connection, the Board agreed that market-based economic instruments were often the most cost-efficient approach to internalization, creating a continuing incentive to reduce external environmental costs, but it noted that such instruments make the true costs of environmental protection highly visible and require the existence of markets and administrative structures, which may not be adequately developed in some countries.

7. As regards national policy issues, the Board agreed that success in achieving internalization within a given country was likely to be improved if attention was paid to the following elements, *inter alia*, of a potential policy mix:

(a) Attenuation or elimination of policies that distort resource allocation, in particular, environmentally unsound subsidies. Agricultural subsidies are of importance in this context, particularly those which have a trade effect;

(b) Correction of fundamental incentive failures, such as insecure or absent property rights, or unpriced resources;

(c) Gradual introduction of other internalization policies of a regulatory or economic nature. These could include product or emission charges, other economic instruments for internalization and the reinforcement of institutional capacity in the environmental area;

(d) Environmental impact assessment in public decision making, in particular concerning public projects.

It was also agreed that sound macroeconomic policies, a strong administrative and fiscal system, the development of human resources in environmental management and administrative efficiency were essential for successful internalization.

8. With respect to intergovernmental policy issues, the Board agreed that, in addition to measures at the domestic level, an efficient system of positive incentives at the international level would help to induce cooperative environmental protection with special attention being paid to positive incentives directed towards developing countries, in line with Principle 7 of the Rio Declaration. It was agreed that trade had an essential role to play as a vehicle for internalization, but that the contribution of trade liberalization to sustainable development would be achieved only when the liberalization was accompanied by government policies to ensure the adjustment of economic incentives to environmental objectives. Moreover, commodity pricing issues and the coordination of internalization in commodity-based industries were central to making trade better serve the objectives of sustainable development. Commodity production and processing imposed costs on the environment, and ultimately on those living in areas where such activities took place - costs which were rarely included in the market price. The Board also agreed that external environmental costs frequently arose from the techniques of production rather than from the product itself and noted that technologies already available could provide solutions and that potential future technologies held out the prospect of substantial improvements in production techniques. The heavy financial costs associated with the transfer of "clean" technologies would, however, make necessary the adoption of cooperative approaches (which included, in particular, the private sector) to provide incentives for switching to more environmentally sound technologies.

9. The Board's discussion concluded that work in UNCTAD on the issue of internalization should henceforward assume more specific directions. This indeed it has done, and the issue is being increasingly interwoven into sectoral discussions. Thus, it was a prominent issue during the first session of the Ad Hoc Working Group on Trade, Environment and Development, and it has been agreed that it will be one of the themes of the fourth session of the Standing Committee on Commodities. It is worth noting also that this issue is at the core of the analysis being undertaken worldwide in the context of the work programme of the Commission on Sustainable Development on sustainable consumption (chapter 4 of Agenda 21), to which it can be expected that UNCTAD will be requested to make its contribution.

B. Trade

10. In the field of trade, environment and development, UNCTAD has initiated a comprehensive programme of work, at both the intergovernmental and secretariat levels. Intergovernmental work in UNCTAD has already made major contributions

in the area of trade, environment and development. At the second part of its thirty-ninth session, the Board decided[1] to give consideration to the following areas as elements of its substantive intergovernmental work programme on trade-related aspects of sustainable development:

(a) Trends in the field of trade and environment within the framework of international cooperation;

(b) The reconciliation of environmental and trade policies, including the necessity to ensure that environmental measures do not become an instrument of protection;

(c) Analysis of the impact of environment-related regulations and standards on export competitiveness, particularly of developing countries;

(d) Building of increased awareness and understanding of the interlinkages between trade, environment and development;

(e) Consideration of the special conditions and development needs of developing countries;

(f) Collection, analysis and dissemination of environmental regulations and measures which may have an impact on trade, especially that of developing countries; and

(g) Comparative analysis of country experiences with ways and means of promoting trade expansion and diversification without deteriorating or depleting the natural resource base (with special focus on export competitiveness).

11. UNCTAD's special role on trade and environment has been focused on policy analysis and debate, conceptual work, the building of consensus among member states on the interaction between environmental and trade policies, the dissemination of information to policy makers and the encouragement and provision in capacity building.

12. At the first part of its fortieth session, the Board initiated its deliberations with the issue "Trends in field of trade and environment within the framework of international cooperation". The discussions were supported by a report prepared by the UNCTAD secretariat[2] and the contributions of a panel of experts. The Board considered the theme "The impact of environment-related policies on export competitiveness and market access" at the first part of its forty-first session.

13. In December 1992, the Ad Hoc Working Group on the Expansion of Trading Opportunities for Developing Countries decided as one of the elements of its work programme to "consider the impact of environmental policies and measures on trading opportunities of developing countries with a view to making recommendations for enhancing those opportunities".

14. As noted above, by its decision 415(XL), the Board established an Ad Hoc Working Group on Trade, Environment and Development.[3] At its first session, the Working Group examined eco-labelling, as well as market opportunities for "environmentally friendly" products.[4] The second session of the Working Group will cover (i) the effects of environmental policies, standards and regulations on market access and competitiveness with special reference to developing countries, including least developed among them, and in the light of UNCTAD's empirical studies and (ii) trade, environment and development aspects in establishing and operating eco-labelling programmes. Preliminary conclusions of the work have been reported to UNCTAD's intergovernmental bodies.[5]

15. In addition to these formal meetings of intergovernmental bodies, the Board has concluded that informal intersessional activities, such as the workshop on "Eco-labelling and Trade",[6] could be useful in assisting the Working Group's deliberations.[7] The report of the workshop, which was held at Geneva on 28-29 June 1994, has been made available to the AHWG.[8] It is expected that informal intersessional workshops organized by UNCTAD will continue to provide an opportunity for exchanging views and disseminating information on the different items included in the terms of reference of the AHWG on Trade, Environment and Development. It is also worth noting that the UNCTAD secretariat has been asked to provide inputs to other forums, and has responded to these requests whenever travel and personnel resources permitted; this has had the effect of enhancing the reputation of UNCTAD as an institution at the cutting edge of international analysis and debate on these important issues.[9]

16. The analysis and debate undertaken in UNCTAD's intergovernmental bodies so far has shown that the complexity of the linkages between trade and environment pose significant challenges to the pursuit of sustainable development. Awareness of the importance of these linkages has become evident only recently and UNCTAD, through its country studies, is providing a sound empirical basis for analyzing these linkages. Intergovernmental discussions are aided by the information obtained from UNCTAD's technical assistance programmes which are listed in detail in TD/B/WG.6/Misc.1.[10]

17. Two categories of issues dominate the debate. The first set of issues relate to trade and competitiveness impacts of changes in environmental regulations in a formal sense, as well as to the growing public concern for a better environment. Developing countries are particularly concerned that their trading opportunities may be adversely affected by the growing plethora of environmental policies, regulations and standards. The second set of issues has focused on the environmental impacts of the various attempts at trade liberalization. Concerns from the NGO's, particularly from the OECD countries have highlighted the various kinds of environmental degradation that may result from trade and growth.

18. The discussions in UNCTAD have shown that environmental problems should, so far as possible, be resolved through environmental policies rather than trade restrictions. Moreover, improved market access for developing countries exports, in conjunction with sound macro economic and environmental policies, are more likely to make an important contribution to sustainable development. Countries should seek to avoid the use of trade distortions or restrictions as a means to offset differences in costs arising from differences in environmental standards and regulations since their application could lead to trade distortions and protectionist tendencies.

19. Policies aimed at avoiding undue trade effects of environmentally-related product measures identified by the research undertaken so far, comprise the harmonization of product standards; the use of available science; transparency and early notification; and the provision of information and technical assistance to exporters.

20. On issues related to market access, discussions in UNCTAD's intergovernmental bodies have shown that with regard to product related environmental policies and standards, measures which address consumption and disposal externalities should be regarded as any other quality standard provided they are adopted in an open, equitable and non-discriminatory manner. Reliable and timely information is, however, of the utmost importance to the exporters.

21. With regard to process measures, UNCTAD's intergovernmental discussions have shown that more stringent requirements generally result in environmental benefits, provided that the specific environmental situation of each country is taken into account. Therefore, appropriate environmental measures should take account of the capacity of each country to implement such measures and in some

cases such standards may have to be phased in gradually. This also highlights the importance of striking a balance between the advantages of harmonization from a trade and transparency point of view and the advantages from the point of view of sustainable development of allowing for differences in national standards, particularly process related standards.

22. UNCTAD's intergovernmental discussions have also shown that further studies are required to assess, on the one hand, the economic costs associated with reducing the negative environmental effects of production processes and consumption and, on the other hand, the market opportunities for exporters which may flow from the demand of environmentally friendly products. Sectoral studies and firm level studies particularly in developing countries would be especially important in this context.

23. In such further studies, the following questions would need to be addressed:

(a) analysis of International Environmental Agreements (IEAs) to study (in close cooperation with UNEP) the possible effects of rights and obligations under IEAs on trade and development prospects of developing countries;

(b) the use of economic instruments for environmental purposes in developing countries and the potential effects of this type of instrument used in OECD countries on trade and competitiveness of developing countries;

(c) the differential impacts of environmental policies, standards and regulations on small and large firms. Research in developing countries has indicated that larger firms in these countries, particularly those which tend to be in direct contact with foreign buyers, may more easily meet the environmental requirements in overseas markets;

(d) the issue of exports of domestically prohibited goods;

(e) trade, environment and development aspects in establishing and operating eco-labelling programmes and market opportunities for environmentally friendly products;

(f) the further analysis of the newly emerging environmental measures, such as product liability in OECD countries with a possible impact on the exports from developing countries.

C. Commodities

24. UNCTAD's intergovernmental work on sustainable development in the context of commodities has been based on the Cartagena Commitment of UNCTAD VIII,[11] the Rio Declaration and Agenda 21[12] and the decisions of the Trade and Development Board and the Standing Committee on Commodities referred to in the Introduction.[13] In support of these intergovernmental discussions, the secretariat has developed and implemented a work programme which centres on three issues:

(a) improved natural resources management and environmental protection in the commodities sector;

(b) expanding the utilization, production and trade of environmentally friendly products; and

(c) internalization of environmental costs and resource values.

This programme has benefited from the extrabudgetary support of the Governments of the Netherlands and Norway as well as of UNDP.

25. An early step in this programme was the holding, with the support of the Government of the Netherlands, of a round table meeting on the links between market conditions and the intensity of resource use, in particular environmental effects. Reports on agriculture, forestry, fisheries and mining were discussed by 16 experts. The meeting concluded that there was a need to review in greater detail the environmental externalities associated with the production, consumption and trade of different commodities; the differences among countries regarding environmental consequences of commodity production; the instruments which can be applied to internalize environmental externalities in each particular case; and the need for concerted international action.[14]

26. To prepare and support the second session of the Standing Committee on Commodities, the secretariat focused on the programme element *improved natural resources management and environmental protection in the commodities sector*, whose objective has been to assist in the design and implementation of national and international policies which would ensure that the development of the commodity sector and commodity trade are consistent and mutually supportive with a better management of natural resources and protection of the environment. This work resulted in document TD/B/CN.1/15,[15] presented to that session, which incorporated the findings of case studies on the agricultural sector covering coffee, cocoa and rice production, undertaken to establish a solid factual basis for:

(a) assisting developing countries in designing and implementing policies which promote environmentally desirable production and processing of commodities;

(b) increasing the awareness in developed importing countries of the difficulties faced by governments and producers in developing countries in terms of environmental protection in the commodities sector.

27. The Committee stressed the particular importance it attached to the issue of fostering sustainable development in the commodity field and agreed that the following required special attention in this respect:

(a) examination of national experiences in terms of environmental impacts of commodity production, in particular the determinants of these impacts and their relationship with economic policies and market conditions, and the facilitation of exchange of experiences in this regard;

(b) collection and dissemination of information regarding natural products claimed to have environmental advantages, with a view to expanding the utilization of and international trade in such products;

(c) analysis of the economic implications of the internalization of environmental externalities with respect to commodities and study of possible support mechanisms for such internalization, in particular at the international level, taking into account logistical aspects concerning the transportation of commodities;

(d) inclusion of environmental objectives in international commodity bodies and provision of information to the Standing Committee on this issue;

(e) policies for the sustainable development of mineral-dependent economies, including policies for the sound macroeconomic management of these economies, and for the establishment in all countries concerned of an adequate legal, fiscal and regulatory framework for the management of mineral resources. Assistance would be required for the success of such policies.

The Committee also welcomed the participation by UNCTAD in the organization of the international conference on development, environment and mining held in June 1994.

28. The Conference on Development, Environment and Mining, held in Washington D.C. in June 1994, was organized in cooperation with UNEP, the World Bank and the International Council on Metals and the Environment. The Conference examined eight subjects which are especially important for the sustainable development of mineral economies. These were: macro-economic policy, including the management of the exchange rate and of mineral revenue; the role of public and private enterprise in the exploitation of mineral resources; the role of government in environmental protection; the impact of mining activities on local communities; investment and taxation policy for the mineral industry; information needs for the management of natural resources; environmental liability and the rehabilitation of mining sites; and the practice of environmental management in the mineral industry. As follow-up to the Conference, the UNCTAD secretariat is examining various options for increasing technical assistance to developing mineral economies.

29. As a supplement to the case studies on the minerals sector, an inventory of environmental legislation and practices in the mining and metals industries in selected countries in Asia and the Pacific region was compiled[16] and formed the basis for a regional seminar, held in Indonesia in September 1994. The analysis of environmental legislation and practice showed that the existence of elaborate environmental protection laws does not suffice if they are not effectively implemented or applied. In fact, inadequate implementation and enforcement appear to be the critical shortcoming in most of the countries studied. The study also found that there is a general tendency to copy Western process standards, which results in an inadequate response to environmental challenges and may produce an expensive environmental burden later on.

30. To prepare and support the third session of the Standing Committee on Commodities, the secretariat focused on the programme element *expanding the utilization, production and trade of environmentally friendly products*, which aims to assist developing countries in (i) increasing export earnings through expanding sustainable production and exports of products which are environmentally preferable from the point of view of producing and consuming countries, and (ii) benefiting from enhanced recycling programmes. This work resulted in document TD/B/CN.1/25,[17] presented to that session, which represented a first attempt at categorizing environmentally preferable products; identifying bottlenecks for their increased consumption and production; and classifying the problems that need to be resolved for encouraging the consumption, production and trade of products which cause less environmental stress into five groups:

(a) the uncompetitiveness of prices of most such products in the light of the absence of internalization of environmental costs for competing products;

(b) information constraints regarding the quality, properties and environmental advantages of environmentally friendly products, on the one hand, and commercially relevant variables (such as production volume, production location, transport facilities, prices etc.) on the other;

(c) the creation of markets;

(d) the supportive role of government policies, in particular in the areas of public procurement and standardization;

(e) the provision of international financial assistance for encouraging and supporting the production of environmentally friendly products.

31. In its agreed conclusions on this subject[18], the Committee observed that, while commodity production and processing could in some cases cause local or global environmental damage, it could also provide significant environmental services when carried out sustainably. Moreover, improved competitiveness and increased utilization of environmentally friendlier products could also help in increasing foreign exchange resources of developing countries from which many such products originate. The Committee concluded that further work on these issues was necessary in UNCTAD and that the secretariat should continue its excellent analysis in this area. In so doing, emphasis should be placed on theoretical and practical work regarding the internalization of environmental externalities, with particular focus on the impact on the environment of main distortions in price formation mechanisms, in particular the impact of subsidies and on experimental studies for some specific products where internalization would appear to be most readily addressed. In this connection, it was recognized that internalization had to be universal and undertaken collectively. The UNCTAD secretariat was also urged to undertake work to improve the applicability of lifecycle analysis to commodity issues.

32. The Committee also considered that market forces, assisted by growing consumer awareness of the advantages of environmentally friendly products, were likely to generate increased demand for such products over the next few years, particularly to the extent that consumers were willing to pay a premium for products with environmental advantages. In cases where such demand shifts did not occur spontaneously, it could be expected that fiscal and pricing measures to encourage the internalization of environmental costs could result in significant changes in patterns of consumption. Also important would be increased efforts to stimulate awareness of the environmental advantages of products, and effective marketing.

33. In pursuit of these conclusions, the secretariat is preparing a compendium of products with environmental advantages to increase public awareness of the availability of substitution possibilities. Case studies are being undertaken in several developing countries to identify the supply potential and on the basis of these studies, workshops will be organized on specific environmentally friendly products and on the issue of environmentally preferable products in general. Recycled and re-usable materials are also important in this context, and the secretariat is undertaking work whose aim is to assist developing countries in their assessment of national recycling programmes and evaluation of the likely impact of enhanced global recycling and re-use on the environment, natural resources management, the demand for virgin material and world commodity trade.

34. The third session of the Standing Committee agreed to include as one of the two substantive items on the agenda of the fourth session a discussion of issues related to the third programme element mentioned in paragraph 23, namely *internalization of environmental costs and resource values*. As noted in para. 6, this issue was - at a general level - the subject of Board discussions at its fortieth session, when more specificity was requested for future discussions. The fourth session of the Standing Committee will thus focus on the manner in which the prices of natural commodities and their synthetic competitors could reflect environmental costs.

35. Secretariat work in support of the Board discussion had focused on conceptual aspects, in particular valuation methods, principles of internalization, institutional, policy and market failures as well as the pros and cons of certain internalization instruments. A separate review of policy, institutional and market failures, the nature of externalities and various internalization instruments in the commodity sector has shown that any attempt to internalize externalities should be directed at the externalities themselves, and the techniques that cause them, rather than at the commodities per se. The work is now concentrating on practical aspects of the internalization debate. This will form the basis of training seminars which are planned. In preparation

for the forthcoming discussions in the Standing Committee, a study which undertakes a preliminary assessment of the impact of internalization policies in the agricultural sector has been undertaken. Using a static and a dynamic model, initial evaluation is made of the impact on various environmental and economic variables, including the competitiveness of different country groups.

36. It is also important to note that the UNCTAD secretariat is working very closely with other relevant international organisations in this area. In particular, UNCTAD and UNEP have launched a joint programme which is designed to examine the practical issues that need to be resolved for progress in terms of internalization of environmental costs. It also aims to generate ideas for facilitating multilateral internalization of environmental externalities. This programme contains country and commodity specific case studies as well as deliberations by a high level expert group. Also, cooperation with the OECD has involved the participation at various workshops where the findings of UNCTAD's work were presented.

D. Technology

37. UNCTAD's present work in the field of environmentally sound technologies (ESTs) has been set out in the Cartagena Commitment. Paragraph 42 of the Commitment stresses, *inter alia*, the need for UNCTAD's intergovernmental machinery and the secretariat "to explore and promote policies aimed at generating, adapting and disseminating environmentally sound technologies". In consonance with Trade and Development Board resolution 393 (XXXVIII), the work programme of the Ad Hoc Working Group on the Interrelationship between Investment and Technology Transfer (TD/B/WG.5/3) included the examination of:

(a) the issues involved in the generation, transfer and diffusion of environmentally sound technologies which have an impact on competitiveness and development;

(b) policies and measures for the promotion, development, dissemination and financing of ESTs, particularly in developing countries, taking into account the need to provide incentives to innovators that promote research in and development of these technologies.

38. Item (b) was addressed in a Workshop on the Transfer and Development of ESTs organized in Oslo (from 13 to 15 October 1993)[19] by the UNCTAD secretariat, jointly with the Government of Norway. Item (a) was not directly addressed either by the Oslo Workshop or the Working Group.

39. The outcome of the workshop was considered by the Working Group at its second session and was also used as an input to the intersessional work leading to the second session of the Commission on Sustainable Development. Some of the major policy-related issues addressed by the Oslo workshop and subsequently in the deliberations of the Working Group are outlined below.

(a) In relation to the concept "environmental soundness", the relative nature of the concept was stressed, implying that environmental performance and environmental impacts of technological systems depend on local conditions and on how technology was applied in the local context. It was perceived that nearly all technologies have some kind of environmental impact, and sustainable development meant a successful assessment of environmental impacts at the initial planning stage;

(b) Particular attention was also paid to the role of different actors in the transfer and development of ESTs. The fundamental role of the private sector in this process was stressed, particularly in view of the ongoing privatization efforts in the both developed and developing countries, the increase in R&D activities undertaken by the private

sector and the rapid expansion in foreign investment. In this respect, the potential role of transnational corporations (TNCs) in the transfer of ESTs and the spreading of environmental awareness was highlighted. Building a dialogue between host countries and TNCs was considered instrumental for fulfilling this potential;

(c) The role of Governments in providing the necessary framework to create demand for ESTs and in setting the context for technical change was also highlighted, notably in the form of laws and regulations on environmental protection, measures aimed at internalizing environmental costs as well as other economic incentives. In that context, it was stressed that, wherever possible, economic instruments and performance-based standards were preferable to command and control measures. It was also indicated that structural adjustment programmes which aimed at deregulation and reduced Government involvement could affect the mechanisms available to Governments for ESTs diffusion;

(d) In its final deliberations, the Working Group examined the special problems of SMEs in the generation and transfer of ESTs. The Group discussed the numerous constraints, with regard to information, expertise and finance for upgrading environmental standards, faced by SMEs in developing countries. In its recommendations, the Group identified the major issues relating to SMEs that require further exploration. More specifically, it stressed the need to examine measures aimed at engaging more fully the creative potential of small and medium-sized enterprises in the generation and dissemination of environmentally sound technologies. Indeed, partly in response to this suggestion, the UNCTAD secretariat is currently preparing a research proposal on the role of SMEs in the generation, transfer and diffusion of ESTs;

(e) While assessing the generation and transfer of ESTs, the Working Group stressed the importance of developing domestic capabilities for harnessing imported technology to promote sustainable development. The training of people was the key to achieving that end. In this connection, the Group has singled out training and education for special attention in examining measures aimed at the generation and transfer of technology, in particular among SMEs;

(f) The financial resources necessary for the transfer of ESTs has been identified as a key problem in the transfer process. In the absence of additional concessional finance aimed at the transfer of ESTs, more creative responses, be it through official development aid (ODA) or private channels, were seen to be necessary;

(g) In the deliberations of the Working Group, particular attention was paid to the impact of intellectual property rights (IPR) on transfer and development of ESTs. While noting that the problem of IPRs was not of primary importance, it was felt, nevertheless, that further consideration of this issue would be essential, particularly concerning the impact of IPR on the access to ESTs by SMEs.

40. Concerning the issues involved in the generation, transfer and diffusion of ESTs that have an impact on competitiveness and development, they are part and parcel of the traditional technology issues that have been with UNCTAD for a number of years. Technology and technological change affect productivity, amount and composition of output, levels of employment, skill profiles of the workforce, degree of competitiveness and structure of trade. The incorporation of ESTs as a major topic in the debate on sustainable development has given new impetus and relevance to these issues.

41. In the context of its technical cooperation activities, the UNCTAD secretariat, in cooperation with the Asian and Pacific Centre for Transfer of Technology of the Economic and Social Commission for Asia and the Pacific, organized in November 1992, in Guangzhou (People's Republic of China) a regional seminar on "Investment, trade and technology", which concentrated in its deliberations on trade and technology issues, paying particular attention to the transfer and development of environmentally sound technologies.

42. In November-December 1994, the UNCTAD secretariat made substantive contributions and actively participated in the Workshop on the promotion of access to and dissemination of information on environmentally sound technologies which was organized in Seoul, by the Government of the Republic of Korea in collaboration with the Commission on Sustainable Development.

43. Finally, it should be noted that, since 1993, the UNCTAD secretariat has assumed responsibilities for the servicing of the activities of the United Nations Commission on Science and Technology for Development (CSTD). The Economic and Social Council resolution 1993/74 on the future work of the CSTD provided that one of the three substantive themes of the CSTD in the inter-sessional period 1993-1995 would be the examination of "the science and technology aspects of the sectoral issue to be discussed by the Commission for Sustainable Development in 1995". It was subsequently decided that the sectoral issue would be "The Science and Technology for Integrated Land Management". The CSTD set up a panel to examine this particular issue and its recommendations will be considered at the next session of the CSTD which will meet in May 1995.

E. Services

44. The United Nations Conference on Environment and Development, *inter alia*, addressed the question of marine environment protection and consequently adopted chapter 17 of Agenda 21 calling on States to take necessary measures to prevent further degradation of the marine environment. In particular it requested that the necessary measures be taken to facilitate the establishment of port reception facilities for the collection of oil and chemical residues and garbage from ships as defined by the annexes of MARPOL 73/78.

45. In order to ensure the implementation of provisions of MARPOL, cooperation has been initiated between UNCTAD and IMO aimed at designing a financial instrument that would ensure the funding of investments and operations of waste reception facilities in ports. The basis for this cooperation was laid at the meeting of the IMO Council in June 1994 and subsequently taken note of by the UNCTAD Standing Committee on Developing Services Sectors: Shipping in July 1994.

46. In implementing this agreement, the secretariats of UNCTAD and IMO jointly prepared a document entitled "Reception Facilities" (SPI 3/4) which was submitted to the 3rd meeting of the Ship/Port Interface Working Group held at IMO, 24-28 October 1994. The document recalls the requirements for reception facilities in ports as established under MARPOL and clearly establishes the need to go beyond the physical provision of such facilities by creating an instrument that would give an incentive to ships to actually use existing facilities and to allocate costs of investing in and operating reception facilities in a way that would reflect the "polluter pays" principle.

47. The study proposes the establishment of a fund for reception facilities, so structured and organized that the funding burden falls on those who benefit from the economic activity which gives rise to the risk of pollution. Consequently, both shipowners and cargo owners by means of a fee at registration of the ship, respectively by a "waste element" in freight charges would contribute to the fund. The latter contribution would be of particular importance given the quantity of cargo generated waste incurred. It is estimated that non-authorized dumping of different types of oil wastes alone amounts to approximately 100,000 tons per annum, thus accounting for about 5 per cent of global hydrocarbon

pollution of the oceans.

48. The Ship/port Interface Working Group discussed the findings of the report and agreed to create a sub-group that would further develop this scheme. It is intended that a report on the general feasibility be submitted to the IMO Council at its next session, on the basis of which the Council would be expected to chart the direction of further work towards the implementation of the funding instrument for waste reception facilities in ports.

F. Privatization

49. The issue of "Environmental aspects of privatization" was dealt with at the fourth session of Ad Hoc Working Group on Comparative Experiences with Privatization (5-8 April 1994). Two studies were prepared to assist discussions in this context:

(a) "Issues relating to (a) privatization and the environment and (b) the privatization of pension funds", note by the UNCTAD secretariat (TD/B/WG.3/7/Rev.2/Add.1);

(b) Country presentation by Norway: privatization and the environment. (TD/B/WG.3/Misc.39).

The Group noted that, whereas privatization involved deregulation, environmental protection often required regulation, with the result that there was a need to balance and integrate privatization and environmental policies into the growth process.

50. The Group concluded that it was important that environmental policies and instruments be properly integrated into privatization policies and that environmental impact assessments be undertaken, especially in the area of infrastructure and environmentally sensitive sectors, such assessments being a form of internalization of environmental externalities which might prove less costly than failure to anticipate and prevent potential environmental damage. It also noted that many public enterprises had significant potential environmental liabilities which needed to be addressed prior to privatization: it might be advisable to delay privatization so that restructuring could be undertaken and the structural deficiencies removed in order to avoid irreversible damage to the environment.

51. The Group also considered that it was important that public awareness of environmental considerations be enhanced, and noted that successful campaigns in this regard had been launched in connection with privatization operations, particularly of public enterprises having major environmental importance.

52. In its Final Report, the Group recommended that further analysis be undertaken, by UNCTAD or, as appropriate, by other international organizations, of the issue "privatization, environmental protection and the promotion of environmentally sound technology".

G. Finance

53. Policy mandates for UNCTAD's work in this area have emanated, firstly, from resolutions of the General Assembly pertaining to the convening of UNCED, and its outcome, Agenda 21. More recently, the secretariat's work has derived from requests for assistance in the context of the deliberations within the CSD, including its Ad Hoc Working Group on Finance. Although no intergovernmental body in UNCTAD has explicitly considered this work, it has, as noted in paragraph 3 above, been referred to explicitly in the Board's report to the General Assembly in response to the Assembly's resolution 47/191.

54. Since 1991, the UNCTAD secretariat has been conducting research into the feasibility of a global system of tradeable carbon dioxide (CO_2) emission entitlements (tradeable permits) as a market-based instrument for controlling emissions of greenhouse gases and a potentially important innovative financial mechanism. In May 1992, the secretariat issued a major report on the subject (see UNCTAD/RDP/DFP/1) as a contribution to the work of the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro, in June 1992. That study contained a detailed assessment of key technical elements of a tradeable CO_2 entitlements system, including permit allocation techniques, resource transfers, equity/distributional implications, institutional and administrative requirements.

55. With the adoption of the United Nations Framework Convention on Climate Change, a new series of studies on tradeable CO_2 emission entitlements was undertaken and completed in 1994 (see UNCTAD/GID/8, 9, 10, and 11). These focused mainly on issues of feasibility and implementation; in particular on the institutional requirements for policy-making, and the organization of a global market in CO_2 emission allowances.

56. So far, a number of policy concerns for developing countries as well as industrial countries have been addressed. Among these were:

(a) *The case for greater reliance on the use of market-based economic instruments in dealing with environmental problems and their financing*: A major concern of all countries is the need to bring about emissions control at the lowest possible cost. A transferable entitlement system meets this concern. Markets can dramatically lower the cost of controlling greenhouse gas emissions by enabling utilities that can reduce emissions cheaply to sell their certified excess allowances to other utilities that would have found it more costly to do so. Tradeability therefore allows for the full exploitation of the least-cost opportunities for limiting CO_2 emissions among all countries and for the costs to be born by the wealthiest countries;

(b) *The policy conflicts between the imperative of development based on rapid industrialization (and therefore rising levels of CO_2 emissions well into the future for most developing countries) and the commitments to protect the planet's environment*: Since the solution to such conflicts cannot be simply to exempt developing countries from participating in international efforts at emissions abatement, then the alternative must be to seek policy approaches that are capable of bringing about the overall required global abatement in emissions while allowing for continued economic development in all countries, and to enable the process of industrialization to proceed unimpeded in those countries in which this process is incomplete. It was shown that a tradeable entitlements system provided the flexibility to achieve both goals simultaneously;

(c) *Permits allocation, equity and resource transfers*: A remarkable aspect of any tradeable permits regime is the condition that any initial distribution of permits would, under competitive conditions, bring about the desired least-cost outcome. This implies that the initial distribution of permits could be used to further specific social and economic objectives, such as the transfer of resources for sustainable development, without undermining the goals of abatement. Nevertheless, it has been shown that several allocation possibilities exist that would achieve simultaneously a cost-efficient control of emissions and substantial resource transfers; the latter estimated at about current levels of ODA;

(d) *Feasibility and implementation strategies*: Extensive research has helped to clarify concerns about the feasibility of a global tradeable CO_2 entitlements system. However, most observers feel that a viable

approach to implementation must begin with a simple system of "joint implementation" designed to evolve slowly over time. In this way, participants in the system would benefit from an accumulation of information and the experience of "learning by doing".

57. As regards future initiatives, pilot programmes appear now to be the key to further progress. Learning-by-doing would suggest the establishment of a pilot scheme among the major emitters and interested developing countries. This scheme could be based on a multilateral CO_2 offset programme that would develop and test key elements of a comprehensive tradeable CO_2 emission arrangement. Such a pilot programme would be in conformity with both the spirit of the Framework Convention on Climate Change and the recommendations of the second session of the Commission on Sustainable Development.

58. Finally, it is important to note that the secretariat's work in this area could not have been accomplished without the generous extrabudgetary support of the Governments of Germany, the Netherlands and Norway. In the secretariat's view, it is also fair to say that this work has been extremely well received in the milieux to which it has been presented, in particular the Ad Hoc Working Group on Finance of the CSD.

H. Accounting

59. As noted in paragraph 3 above, the work of the Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting (ISAR) is being integrated into UNCTAD's intergovernmental work programme following the transfer to UNCTAD of the former Centre on Transnational Corporations. In three sessions (1991, 1992 and 1994) ISAR's work on sustainable development issues has concentrated on disclosure of environmental information within the formal financial statements of transnational corporations. It made a number of recommendations on specific items which should be disclosed, such as: the environmental management policy and programmes of the corporation; details of environmentally related expenditures; and, liabilities and provision as a consequence of environmental damage.[20] In March 1995, the thirteenth session of ISAR will consider broader environmental topics which include:

(a) Incentives and disincentives for the adoption of sustainable development by transnational corporations and the role which accounting plays in this decision-making process;

(b) The integration of environmental performance indicators with financial information by transnational corporations;

(c) A review of various national environmental accounting laws and regulations;

(d) Disclosure by transnational corporations of environmental matters in host countries (developing) *vis-à-vis* the disclosure by the same transnational corporation in its home country (developed);

(e) A recent study by the secretariat on accounting for sustainable forestry management;[21]

(f) An "environmental balance sheet" and the relationship of corporate accounting with national accounts in respect to environmental matters.

III. CONCLUSIONS

60. The review of UNCTAD's activities on sustainable development given in section II demonstrates, in the secretariat's view, that the present arrangements for dealing with sustainable development in UNCTAD are working well. The institutional machinery is sufficiently flexible to allow sustainable development issues to be integrated into the work programmes of both Standing Committees and Ad Hoc Working Groups as and when these issues appear to be mature enough for fruitful intergovernmental discussion. Although it might be argued that the limitation of agendas for meetings of such bodies to two substantive items could restrict the scope for discussion of matters related to sustainable development, it could equally be argued that by imposing what amounts to a priority-setting exercise the agenda limitation prevents the holding of debates on issues not yet ready for discussion.

61. The review has also highlighted the fact that gaps remain in UNCTAD's intergovernmental coverage of sustainable development issues. In particular, the Standing Committee on Poverty Alleviation has as yet done no work on the linkages between poverty and sustainable development, an issue which is arguably of the highest importance if it is true, as some observers contend, that poverty is itself an important cause of environmental degradation. It is also recalled that agenda item 5(a) of the current Board session is devoted to "Sustainable development, population, human resources and environment" in the context of the United Nations New Agenda for the Development of Africa in the 1990s. It may be expected that the discussion under this item will help to fill this lacuna.

62. One question which needs to be posed in the context of intergovernmental work on sustainable development in UNCTAD is what is the appropriate forum for such work. In its decision 402(XXXIX), the Board decided to consider the theme of "trade and environment" at the first part, and "another theme or themes on sustainable development" at the second part, of its annual sessions. As noted in paragraph 2 above, subsequently, in its decision 415 (XL), the Board established and adopted terms of reference for an Ad Hoc Working Group on Trade, Environment and Development. On the assumption that governments would wish discussions in the Board to be reserved for matters of high policy, it would seem reasonable that technical work on sustainable development should be conducted primarily in the subsidiary bodies of the Board and that, when an issue was judged to be of sufficient political maturity, it should then be brought before the Board.

63. The review also indicates, again in the secretariat's view, that UNCTAD is playing its role in the United Nations system-wide thrust towards sustainable development. Reports of intergovernmental discussions within UNCTAD, and studies and analyses prepared by the secretariat to animate such discussions, have been seen as valuable inputs into processes in other parts of the system, particularly in the context of the Commission on Sustainable Development and its manifold inter-sessional activities. As Task Manager for trade and environment, UNCTAD has a central role in this area, but in other areas too - especially finance and technology - UNCTAD has played an important (and sometimes key) role. And it is expected that, as the work on internalization develops, UNCTAD's role in the United Nations system in this area will also be seen to be important.

64. Finally, the secretariat would like to record that, without the generous help of the Governments of Finland, France and the Netherlands in making available to the secretariat for two-year periods highly competent junior staff with strong environmental economics qualifications, the secretariat would not have been able to achieve what it has done in this area. The secretariat expresses the hope that other governments will prove to be equally generous in their support of its sustainable development activities, in the form of both human and financial resources.

Endnotes

1. See the annex to decision 402 (XXXIX).

2. Report TD/B/40(1)/6 on "Trends in the field of trade and development in the framework of international cooperation".

3. See document TD/B/40(2)/26 of 17 June 1994.

4. Report TD/B/WG.6/2 "International cooperation on eco-labelling and eco-certification and market opportunities for environmentally friendly products - Eco-labelling and market opportunities for environmentally friendly products".

5. Reports TD/B/40(1)/6 on "Trends in the field of trade and development in the framework of international cooperation" and TD/B/41(1)/4 on "The impact of environment-related policies on export competitiveness and market access".

6. Report of the Workshop on Eco-labelling and Trade (TD/B/WG.6/MISC.2).

7. Agreed conclusions on Sustainable Development-Trade and Environment adopted by the Board at the first part of its forty-first session, paragraph 9.

8. UNCTAD secretariat, report of the Workshop on Eco-labelling and International Trade, Geneva, 28-29 June 1994. In addition, the secretariats of UNCTAD and UNEP brought out a joint report.

9. Jha, V., R. Vossenaar and S. Zarrilli, "Eco-labelling and International Trade, Preliminary Information from Seven Systems". Draft discussion paper prepared for the ISO/IEC SAGE subgroup on eco-labelling, Toronto, 27-28 May 1993; and Jha and Zarrilli, "Eco-labelling initiatives as potential barriers to trade - a viewpoint from developing countries". Paper prepared for the OECD Informal Experts Workshop on Life-Cycle Management and Trade, Paris, 20-21 July 1993.

10. UNCTAD's technical cooperation programme on trade and environment (TD/B/WG.6/Misc.1)

11. Paragraph 214 of the Cartagena Commitment of UNCTAD VIII states that "UNCTAD should systematically explore the links between commodity policies, use and management of natural resources and sustainable development and should provide information and technical cooperation in this regard".

12. Chapter 4 on changing consumption patterns: paragraphs 4.7., 4.17., 4.24. and 4.25.

13. The work programme of UNCTAD's Standing Committee on Commodities includes the following items under the heading of "Fostering sustainable development in the commodity field":

1. Analysis of national experiences in the management of natural resources with regard to commodity production;
2. Exploration of the links between commodity policies, use and management of natural resources and sustainable development;
3. Identification of environmental problems that are specific to commodity production and processing and an examination of ways of improving developing countries' access to international financial and technical support including environmentally sound technologies to cope with such problems;
4. Identification of means by which the competitiveness of natural products with environmental advantages could be improved;

5. Examination of the manner in which prices of natural commodities and their synthetic competitors could reflect environmental costs.

14. "Report of the round table meeting on the links between market conditions and the intensity of resource use, in particular environmental effects" UNCTAD/COM/13, 24 September 1992.

15. "Fostering sustainable development in the commodity field; Experiences concerning environmental effects of commodity production and processing: Synthesis of case studies on cocoa, coffee and rice".

16. "Environmental legislation for the mining and metal industries in Asia", document UNCTAD/COM/40.

17. "Identification of means by which the competitiveness of products with environmental advantages could be improved; Reducing the environmental stress of consumption without affecting consumer satisfaction".

18. Document TD/B/CN.1/L.8.

19. See report of the Workshop on the Transfer and Development of Environmentally Sound Technologies (ESTs), UNCTAD/ITD/TEC/13.

20. See document UNCTAD/DTCI/1 entitled "Conclusions on accounting and reporting by transnational corporations".

21. Document UNCTAD/DTCI/4, entitled "Accounting for sustainable forestry management: a case study".